

Linzer biol. Beitr.	49/1	229-234	28.7.2017
---------------------	------	---------	-----------

## A revision of the *Alevonota* species of the Palaearctic region. II. A new species from Cyprus and additional records (Coleoptera: Staphylinidae: Aleocharinae)

Volker ASSING

**Abstract:** *Alevonota flexa* nov.sp. (Cyprus) is described and illustrated. Additional records of four species are reported, among them several new country records. *Alevonota japonica* (CAMERON, 1933), a species with a remarkable sexual dimorphism of head shape and eye size, is illustrated, based on new material from Hokkaido.

**Key words:** Coleoptera, Staphylinidae, Aleocharinae, *Alevonota*, Palaearctic region, Cyprus, Japan, taxonomy, new species, additional records, sexual dimorphism.

### Introduction

According to SCHÜLKE & SMETANA (2015), 41 species of the genus *Alevonota* THOMSON, 1858 were previously recorded from the Palaearctic region. In a recent revision, ASSING & WUNDERLE (2008) recognized 25 species in the West Palaearctic region, only one of which, *A. gracilenta* (ERICHSON, 1839), had been doubtfully reported from Cyprus. In Japan, the genus is represented by a single species, *A. japonica* (CAMERON, 1933), which was originally described in the genus *Amarochara* THOMSON, 1858 and subsequently moved to *Alevonota* by ASSING (2002).

The present study is based on material studied since the previous revision. This material included three specimens of *A. japonica* collected in Hokkaido by Tomáš Lackner (Prague) and several specimens of an undescribed species of the *A. rufotestacea* group collected in Cyprus by Matúš Kocian (Prague). For recent records of *A. cretica* Assing & Wunderle, 2008 (Crete), *A. rufotestacea* (KRAATZ, 1856) (Greece: Samos, Turkey, Israel), *A. libanotica* (FAGEL, 1965) (Turkey, Israel), and *A. gracilenta* (Turkey) see ASSING (2009, 2013, 2014, 2015) and ASSING & FELDMANN (2012).

### Material, methods, and measurements

The material treated in this study is deposited in the following collections:

BMNH ..... Natural History Museum, London (R. Booth)

cAss..... author's private collection

cKoc..... private collection Matúš Kocian, Praha

The morphological studies were conducted using a Stemi SV 11 microscope (Zeiss Germany) and a Jenalab compound microscope (Carl Zeiss Jena). A digital camera (Nikon Coolpix 995) was used for the photographs.

Body length was measured from the anterior margin of the labrum to the abdominal apex, the length of the forebody from the anterior margin of the labrum to the posterior margin of the elytra, head length along the middle from the anterior margin of the clypeus to the posterior carina of the head, elytral length at the suture from the apex of the scutellum to the posterior margin of the elytra, and the length of the median lobe of the aedeagus from the apex of the ventral process to the base of the capsule. The "parameral" side (i.e., the side where the sperm duct enters) is referred to as the ventral, the opposite side as the dorsal aspect.

## Results

### *Alevonota rufotestacea* (KRAATZ, 1856)

**Material examined:** Italy: 1 ♂, Sardegna, Supramonte Monte Tiscali (NU), 40°14'N, 9°29'E, 410 m, 1.IV.2014, leg. Meybohm (cAss). Slovenia: 1 ex., Livek, Jama Malešče cave entrance, 15.IV.2010 Ausmeier & Tolasch (cAss). Serbia: 1 ex., Javorak planina, Grza, 720 m, 8.IV.2007, leg. Stévanović (cAss). Albania: 1 ex., Tiranë, 10 km ENE Tiranë, Mali Dajti, 41°22'N, 19°55'E, 1160 m, mixed beech forest, litter sifted, 21.V.2010, leg. Assing (cAss); 1 ex., Korçë, 37 km W Korçë, Mali i Ostrovikës, 40°40'N, 20°21'E, 1340 m, beech forest margin, beech litter and fern roots sifted, 26.V.2010, leg. Assing (cAss). Turkey: 1 ex., Bursa, Samanlı Dağları, 40°32'N, 29°52'E, 740 m, 20.IV.2010, leg. Brachat & Meybohm (cAss); 1 ex., Sinop, 15 km SW Sinop, S Kılıçlı, 41°57'N, 35°02'E, 80 m, grassy road margin, grass between shrubs, sifted, 4.IV.2009, leg. Assing (cAss); 1 ex., Mersin, E Çamlıyayla, Darpınarı, 37°09'N, 34°43'E, 710 m, 25.IV.2011, leg. Brachat & Meybohm (cAss); 1 ex., Adana, 7 km E Kamışlı, 37°32'N, 35°00'E, 1330 m, 26.IV.2011, leg. Brachat & Meybohm (cAss); 5 exs., Adana, Belededik, 37°21'N, 34°54', 740 m, 16.IV.2011, leg. Brachat & Meybohm (cAss).

**Comment:** This species is widespread in the Western Palaearctic, from Turkey and the Middle East to Northwest Africa, France, and the British Isles (ASSING & WUNDERLE 2008). The above specimens from Serbia and Albania represent new country records.

### *Alevonota elegantula* (BRISOUT DE BARNEVILLE, 1863)

**Material examined:** Gibraltar: 1 ex., Gibraltar, leg. Cameron (BMNH).

**Comment:** The distribution of *A. elegantula* is of the expansive Atlanto-Mediterranean type and ranges from the Iberian Peninsula to Central Europe (Germany, Poland) (ASSING & WUNDERLE 2008). The above specimen represents the first record from Gibraltar.

### *Alevonota libanotica* (FAGEL, 1965)

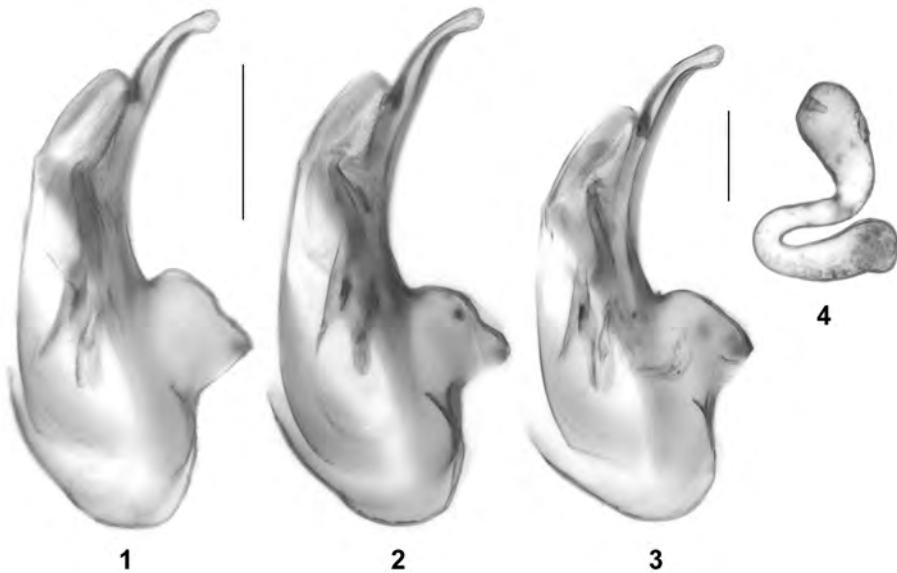
**Material examined:** Turkey: 4 exs., Çanakkale, Kurucam Tepe, 39°43'N, 27°11'E, 430 m, 14.IV.2010, leg. Brachat & Meybohm (cAss); 1 ex., Isparta, 10 km SE Sütçüler, 37°25'N, 31°02'E, 1520 m, calcareous slope, grass and moss sifted, 26.IV.2011, leg. Assing (cAss); 1 ex., Antalya, Olimpos, S Hisarçandır, 36°43'N, 30°26'E, 1240 m, 12.IV.2008, leg. Brachat & Meybohm (cAss); 1 ex., Antalya, Alanya-Taşkent, Karapınar, 36°37'N, 32°25'N, 1090 m, 25.IV.2008, leg. Brachat & Meybohm (cAss); 1 ex., Niğde, E Madenköy, 37°27'N, 34°39'E, 1615-1870 m, 17.IV.2011, leg. Brachat & Meybohm (cAss); 4 exs., Adana, Belededik, 37°20'N, 34°55'E, 690 m, 16.IV.2011, leg. Brachat & Meybohm (cAss); 1 ex., Adana, 7 km E Kamışlı, 37°32'N, 35°00'E, 1330 m, 26.IV.2011, leg. Brachat & Meybohm (cAss); 1 ex., Kahramanmaraş, Başkonuş Yaylası, 37°34'N, 36°34'E, 1250 m, 24.IV.2009, leg. Brachat & Meybohm (cAss); 2 exs., Hatay, Kızıldağ, Madenli, 36°25'N, 36°07'E, 1120 m, 11.IV.2009, leg. Brachat & Meybohm (cAss). Jordan: 1 ♂, 1 ♀, Ajlun, Ajlun C'astle, 32°20'N, 35°43'E, 980 m, 21.II.2014, leg. Meybohm (cAss); 2 ♂ ♂, 1 ♀, Irbid, Zubia, 32°26'N, 35°46'E, 600-840 m, 22.II.2014, leg. Meybohm (cAss).

**Comment:** The distribution of this East Mediterranean species ranges from the Middle East westwards to Bulgaria and the Greek island Lesbos (ASSING & WUNDERLE 2008). The above specimens from Jordan represent new country records.

***Alevonota flexa* nov.sp.** (Figs 1-4)

**Type material:** Holotype ♂: "Cyprus occ., Stauros, N-slope - forest, N35°1,1622' E32°51,8766', 850 m, leaf litter sifting, 7.4.2014 M. Kocian lgt. / Holotypus ♂ *Alevonota flexa* sp. n. det. V. Assing 2016" (cAss). Paratypes: 1 ♂, 1 ♀, 3 exs: same data as holotype (cKoc, cAss); 2 ♂, 1 ♀, 3 exs: "Cyprus occ., near Kannaviou Dam - river valley, N34°56,61768' E32°35,54598', 460 m, leaf litter sifting, 9.4.2014 M. Kocian lgt." (cKoc, cAss).

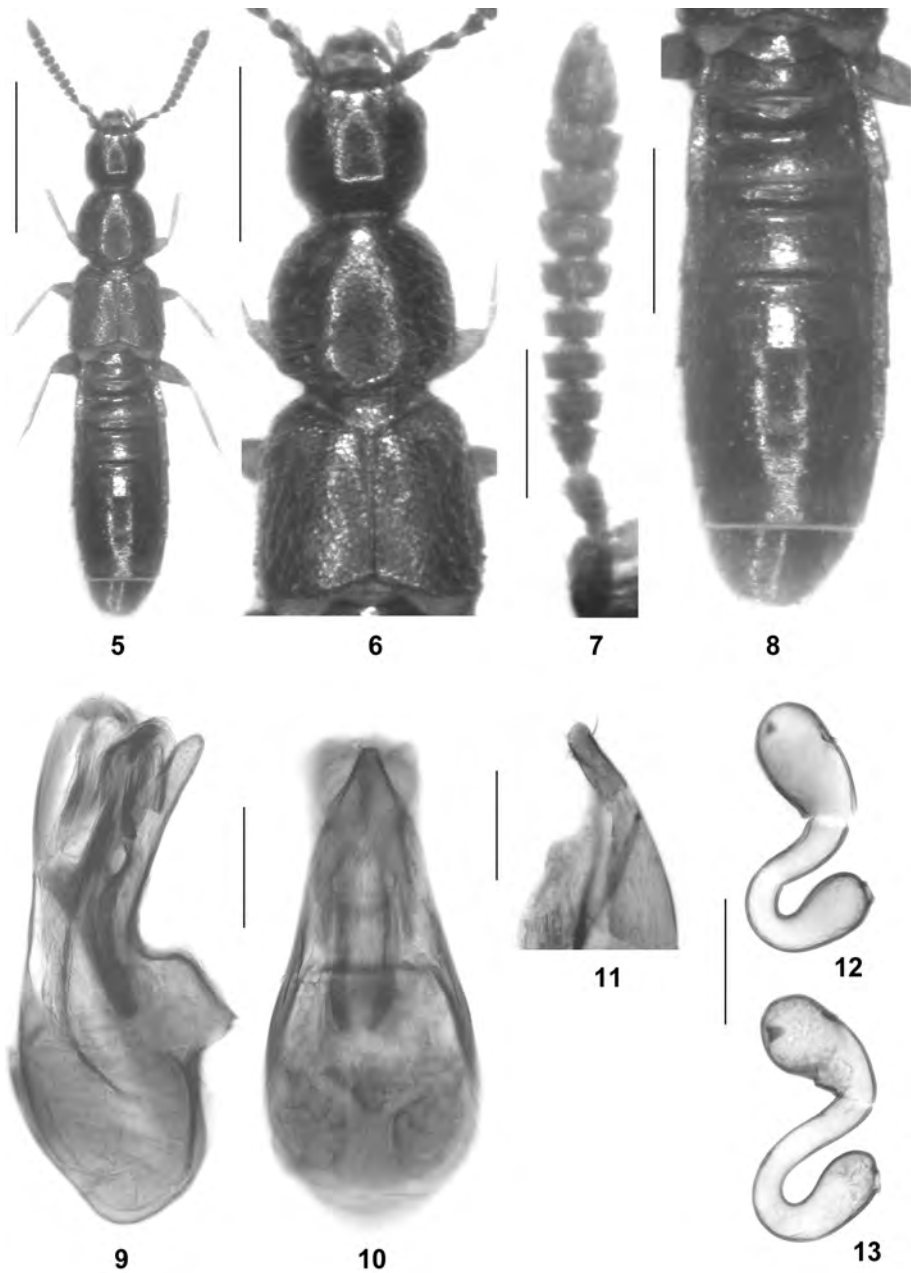
**Etymology:** The specific epithet is the past participle of the Latin verb *flectere* (to bend) and alludes to the strongly curved apex of the ventral process of the aedeagus.



**Figs 1-4:** *Alevonota flexa* nov.sp.: (1-3) median lobe of aedeagus in lateral view; (4) spermatheca. Scale bars: 0.1 mm.

**Description:** Species of highly variable size; body length 2.3-3.4 mm; length of forebody 1.2-1.6 mm. Habitus as in Fig. 1. Coloration: head dark-brown to blackish-brown; pronotum reddish; elytra dark-yellowish; abdomen pale-reddish, with the middle of tergite VI more or less distinctly and more or less extensively infuscate; legs yellow; antennae pale reddish.

Head approximately 1.1 times as broad as long, broadest across eyes; dorsal surface with moderately fine and moderately dense punctation, impunctate (or nearly so) along middle; interstices with shallow, but distinct microreticulation. Eyes large and bulging, longer than postocular region in dorsal view. Antenna 0.6-0.7 mm long and strongly incrassate; antennomeres IV-X strongly transverse, VI-VIII disc-shaped and approximately four times as broad as long.



**Figs 5-13:** *Alevonota japonica* (CAMERON) from Hokkaido: (5) habitus; (6) forebody; (7) antenna; (8) abdomen; (9-10) median lobe of aedeagus in lateral and in ventral view; (11) apical portion of paramere; (12-13) spermatheca. Scale bars: 5: 1.0 mm; 6, 8: 0.5 mm; 7: 0.2 mm; 9-13: 0.1 mm.

Pronotum 1.17-1.22 times as broad as long and approximately 1.15 times as broad as head, broadest near anterior angles; midline with or without indistinct median sulcus in posterior three-fourths; punctation fine and moderately dense, less distinct than that of head; microreticulation coarser than that of head.

Elytra slightly longer than pronotum; punctation very fine and dense; interstices with distinct microreticulation. Hind wings present.

Abdomen slightly narrower than elytra; punctation moderately dense on tergite III, rather sparse on tergites IV and V, and very sparse on tergites VI-VIII; microsculpture shallow, composed of isodiametric and short transverse meshes; posterior margin of tergite VIII with palisade fringe.

♂: posterior margin of sternite VIII smoothly convex; median lobe of aedeagus (Figs 1-3) 0.31-0.35 mm long; ventral process subapically abruptly curved in lateral view.

♀: posterior margin of sternite VIII distinctly concave in the middle; spermatheca as in Fig. 4.

**Comparative notes:** As can be inferred from the similar external and sexual characters, *A. flexa* is closely allied to *A. rufotestacea*, *A. libanotica*, and allied species. It is reliably distinguished from all of them only by the shape of the ventral process of the aedeagus, which is smoothly curved in other species of this group. For illustrations of other *Alevonota* species known from the West Palaearctic region see ASSING & WUNDERLE (2008).

**Distribution:** The absence of records from other regions suggests that *A. flexa* is endemic to Cyprus, where it was collected in two localities at altitudes of 460 and 850 m.

#### ***Alevonota japonica* (CAMERON, 1933) (Figs 5-13)**

**Material examined:** Japan: 1♂, 2♀♀, Hokkaido, Nopporo Forest Park, 24.V. & 5.VI.2008, leg. Lackner (cAss).

**Comment:** This species was originally described and subsequently recorded only from Honshu (ASSING 2002, CAMERON 1933). The above specimens from Hokkaido are somewhat darker in coloration than the material seen from Honshu, but otherwise no significant differences were observed. Interestingly, unlike other *Alevonota* species, *A. japonica* is characterized by a sexual dimorphism of the head. In the male, the head is transverse, approximately 1.1 times as wide as long, and the eyes are larger, approximately as long as the postocular region from the posterior margin of the eye to the posterior constriction of the head, and more bulging. For illustrations of the external and sexual characters of the material from Hokkaido see Figs 5-13.

#### **Acknowledgements**

I am indebted to the collectors indicated in the species sections for making material available for this study, in particular to Matúš Kocian for the generous gift of the holotype of *A. flexa*.

## Zusammenfassung

*Alevonota flexa* nov.sp. (Zypern) wird beschrieben und abgebildet. Weitere Nachweise von vier *Alevonota*-Arten werden gemeldet, darunter mehrere Erstnachweise. *Alevonota japonica* (CAMERON, 1933), eine Art mit einem bemerkenswerten Sexualdimorphismus der Kopfform und der Augen, wird von Hokkaido nachgewiesen und abgebildet.

## References

- ASSING V. (2002): A taxonomic and phylogenetic revision of *Amarochara* THOMSON. I. The species of the Holarctic region (Coleoptera: Staphylinidae, Aleocharinae, Oxypodini). — Beiträge zur Entomologie, Keltern **52** (1): 111-204.
- ASSING V. (2009): On the Staphylinidae of Turkey. VI. Thirteen new species and additional records (Coleoptera). — Koleopterologische Rundschau **79**: 117-172.
- ASSING V. (2013): On the Staphylinidae (Coleoptera) of Turkey IX. Five new species, a new synonymy, and additional records. — Stuttgarter Beiträge zur Naturkunde A, Neue Serie **6**: 103-125.
- ASSING V. (2014): On the Staphylinidae of Turkey X. Two new species and additional records (Insecta: Coleoptera). — Linzer Biologische Beiträge **46** (2): 1133-1146.
- ASSING V. (2015): On the Staphylinidae (Coleoptera) of Crete II. Seven new species, a new synonymy, and additional records. — Stuttgarter Beiträge zur Naturkunde A, Neue Serie **8**: 95-112.
- ASSING V. & B. FELDMANN (2012): On the Staphylinidae of Israel (Insecta: Coleoptera). — Linzer Biologische Beiträge **44** (1): 351-363.
- ASSING V. & P. WUNDERLE (2008): On the *Alevonota* species of the Western Palaearctic region (Coleoptera: Staphylinidae: Aleocharinae: Athetini). — Beiträge zur Entomologie, Keltern **58** (1): 145-189.
- CAMERON M. (1933): New species of Staphylinidae (Col.) from Japan. — The Entomologist's Monthly Magazine **69**: 208-219.
- SCHÜLKE M. & A. SMETANA (2015): Staphylinidae, pp. 304-1134. — In: LÖBL I. & D. LÖBL (eds), Catalogue of Palaearctic Coleoptera. Volume 2. Hydrophiloidea – Staphylinoidea. Revised and updated edition. Leiden: Brill: xxvi + 1702 pp.

Author's address:

Dr. Volker ASSING  
 Gabelsbergerstr. 2  
 D-30163 Hannover, Germany  
 E-mail: vassing.hann@t-online.de